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ICE MILLER ONE AMERICAN SQUARE BOX 82001 INDIANAPOLIS, IN 46282			EXAMINER BERNATZ, KEVIN M	
			ART UNIT 1773	PAPER NUMBER

DATE MAILED: 10/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/700,184

Applicant(s)

SCARPONE, STEPHEN  
PATRICKNEAL

Examiner

Kevin M. Bernatz

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) 20-40 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-40 are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |                                                                                                                                                       |                                                                                         |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                                                           | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>1/30/04; 7/26/04</u> . | 6) <input type="checkbox"/> Other: ____.                                                |

## **DETAILED ACTION**

### ***Election/Restriction***

1. Applicant's election without traverse of Group I, claims 1 - 19 in the interview of September 20, 2005 is acknowledged. Claims 20 – 40 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. The requirement is still deemed proper and is therefore made FINAL.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 2, 4, 5, 9 and 12 – 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Johnson et al. (U.S. Patent No. 6,220,305 B1).

Regarding claim 1, Johnson et al. disclose an enamel base comprising a blend of a coal tar pitch (i.e. applicants' "bituminous base"), a coal tar oil (i.e. applicants' "petroleum base") and coal, said enamel base having a softening point meeting applicant's claimed limitations (*col. 4, lines 30 – 45*).

Regarding the limitations "substantially homogenous" and "substantially free from separated layers", the Examiner notes that Johnson et al. disclose using the coal tar

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enamel to form continuous coatings (*col. 4, line 46 bridging col. 5, line 16*), which the Examiner deems would not be capable if the enamel was "clumpy" (i.e. not homogenous) or separated (i.e. not free of separated layers).

Regarding claim 2, Johnson et al. disclose enamel's meeting applicant's claimed property limitations (*col. 4, lines 38 – 45*).

Regarding claims 9 and 12 - 17, Johnson et al. disclose adding fillers meeting applicants' claimed limitations as well as the property limitations (*col. 4, lines 30 – 45*).

Regarding claims 4, 5, 18 and 19, Johnson et al. disclose materials meeting applicant's claimed material limitations (*col. 4, lines 29 – 38, where the Examiner notes that "coal tar oil" is deemed to read on "aromatic petroleum oil"*).

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1 – 7 and 9 – 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson et al. as applied above, and further in view of Boyer et al. (U.S. Patent No. 6,403,659 B1).

Johnson et al. is relied upon as described above.

While the Examiner maintains that “coal tar oil” reads on the limitation of “aromatic petroleum oil”, Johnson et al. fail to explicitly disclose an enamel base comprising a mixture of a bituminous base and a “petroleum” base.

However, Boyer et al. teach that one can replace a pure coal tar pitch sealer with a blend of bituminous base and a cut-back oil (i.e. applicants’ “petroleum oil”) (*col. 3, lines 9 – 18*). Boyer et al. further teach that such a composition can provide good performance properties while reducing the toxicity and carcinogen concentration within the mixture (*col. 8, lines 24 – 67 and Abstract*). The Examiner notes that Boyer et al. explicitly teach that the “cut-back oil” meets applicant’s claimed petroleum oil limitations (*col. 3, lines 5 – 67 and col. 7, lines 15 – 59*) and that the invention is applicable to pipe coatings (*col. 10, lines 56 – 59*).

It would therefore have been obvious to one of ordinary skill in the art at the time of the applicant’s invention to modify the device of Johnson et al. to use an enamel base comprising a bituminous base and a petroleum base as taught by Boyer et al., since such a mixture can provide good performance properties while reducing the toxicity and carcinogen concentration within the mixture.

Regarding claims 3 and 10, the Examiner deems that since Boyer et al. explicitly disclose that the taught mixtures have reduced carcinogen content and toxicity that it would have been within the knowledge of one of ordinary skill to form enamel bases having a B(a)P equivalent meeting applicants’ claimed limitations, since it would have been desired to form as low a toxicity composition as possible while still obtaining adequate material performance.

Regarding claims 6, 7 and 11, Boyer et al. disclose concentrations for the materials meeting applicant's claimed limitations (*col. 7, line 15 bridging col. 10, line 63*).

6. Claims 3 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson et al. as applied above in Paragraph 2, and further in view of the IDS article by Mirtchi et al. ("Polycyclic aromatic hydrocarbons (PAH's) in pitches used in the aluminum industry).

Johnson et al. is relied upon as described above.

Johnson et al. fail to disclose controlling the "B(a)P" content to meet applicant's claimed limitations.

However, Mirtchi et al. teach that coal tar pitch is known to possess a high toxicity and carcinogen content that is related to the B(a)P value, and that minimizing the B(a)P value of a coal tar pitch would result in a product possessing less toxicity and less carcinogens.

It would therefore have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the device of Johnson et al. to utilize an enamel base meeting applicant's claimed B(a)P limitations as taught by Mirtchi et al., since utilizing an enamel base with a minimized B(a)P value would result in a product possessing less toxicity and less carcinogens.

7. Claims 3 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson et al. in view of Boyer et al. as applied above in Paragraph 4, and further in view of the IDS article by Mirtchi et al. ("Polycyclic aromatic hydrocarbons (PAH's) in pitches used in the aluminum industry).

Johnson et al. and Boyer et al. are relied upon as described above.

While the Examiner deems that Boyer et al. implicitly teach the claimed limitations, neither of the above explicitly disclose controlling the "B(a)P" content to meet applicant's claimed limitations.

However, Mirtchi et al. teach that coal tar pitch is known to possess a high toxicity and carcinogen content that is related to the B(a)P value, and that minimizing the B(a)P value of a coal tar pitch would result in a product possessing less toxicity and less carcinogens.

It would therefore have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the device of Johnson et al. in view of Boyer et al. to utilize an enamel base meeting applicant's claimed B(a)P limitations as taught by Mirtchi et al., since utilizing an enamel base with a minimized B(a)P value would result in a product possessing less toxicity and less carcinogens.

8. Claim 8 rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson et al. in view of Boyer et al. as applied above in Paragraph 4, and further in view of Pennie (U.S. Patent No. 3,607,515).

Johnson et al. and Boyer et al. are relied upon as described above.

Neither of the above disclose using "coal dust" in an amount meeting applicant's claimed limitations.

However, Pennie teaches a coal tar enamel formed using powdered coal (i.e. applicant's "coal dust") in an amount meeting applicant's claimed concentration (25 – 35% *filler from the Table in column 2*), wherein these compositions possess operating temperature ranges of up to 500 °F.

It would therefore have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the device of Johnson et al. in view of Boyer et al. to utilize "coal dust" meeting applicant's weight percent limitations as taught by Pennie, since such an amount of "coal dust" can provide for enamels having operating temperature ranges of up to 500 °F.

### ***Conclusion***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin M. Bernatz whose telephone number is (571) 272-1505. The examiner can normally be reached on M-F, 9:00 AM - 6:00 PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney can be reached on (571) 272-1284. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KMB  
September 28, 2005

  
Kevin M. Bernatz, PhD  
Primary Examiner